



Connecticut Department of Energy and Environmental Protection



Connecticut Department of
**ENERGY &
ENVIRONMENTAL
PROTECTION**

Status of RCSA Section 22a-174-22 – The Next Generation

October 9, 2014
Wendy Jacobs



Connecticut Department of Energy and Environmental Protection

Individual meetings held so far...

- PSEG
- Yale
- Navy Sub Base
- UTC
- Dominion
- NRG
- UCONN (written comments only)
- MIRA (meeting to be scheduled)



Common Issues

- **Applicability**
 - Define non-road engine applicability.
 - NY-type applicability is very clear.
 - Define the universe impacted by 137/274 lb/day provisions.
- **Emissions limits**
 - Averaging times and startup/shutdown are important considerations.
 - Averaging provisions across units could be useful.
 - NY-type stratification of boiler limits by size and fuel makes more sense than a “one-size fits all” limit.
 - Concerns raised about feasibility of trading in Phase 1.
- **Implementation of the requirement not to test engines on bad ozone days** can be logistically challenging.
- **Compliance testing.**
 - Allow the schedule for retesting to prevent test creep.
 - Test requirements (especially with respect the capacity at the time of the test) should be consistent with federal requirements (i.e., MATS, Boiler MACT, RICE NESHAP, NSPS).



Current Thinking

- For Phase 2, divide boiler emissions limits by size and fuel.
- Include clarifying language regarding non-road engines.
- Considering whether the goal of the 137/274 lb/day applicability requirement could be met with a different provision or whether to maintain as is.
- Redefine Phase 1 with no trading (program feasibility in doubt) and other compliance options.
- Redefine Phase 2.
- Considering Phase 1/Phase 2 requirements specific to High Electric Demand Day (HEDD) units.



NJ and NY NOx limits for Boilers Serving EGUs and ICI boilers

NJ	Coal	Natural gas	Other gas (not refinery)	No. 2 oil	Other liquid fuels	Dual fuel
Boilers serving EGUs	1.50 lb/MWh	1.00 lb/MWh	_____	1.00 lb/MWh	2.00 lb/MWh	_____
ICI boilers* 25 MMBtu/hr up to 100 MMBtu/hr	_____	0.05 lb/MMBtu	0.20 lb/MMBtu	0.08 lb/MMBtu	0.20 lb/MMBtu	0.12 lb/MMBtu
ICI boilers* 100 MMBtu/hr or greater	_____	0.10 lb/MMBtu	0.20 lb/MMBtu	0.10 lb/MMBtu	0.20 lb/MMBtu	0.20 lb/MMBtu

*Whether or not at a major NOx facility

NY	Coal	Gas only	Gas/Oil
Mid size boilers 25-100 MMBtu/hr	_____	0.05 lb/MMBtu	0.08 lb/MMBtu (distillate oil/gas) 0.20 lb/MMBtu (residual oil/gas)
Large boilers 100-250 MMBtu/hr	0.20 lb/MMBtu (pulverized) 0.08 lb/MMBtu (fluidized bed)	0.06 lb/MMBtu	0.15 lb/MMBtu
Very large boilers 250 MMBtu/hr and >	0.12 lb/MMBtu 0.20 lb/MMBtu (cyclone) 0.08 lb/MMBtu (fluidized bed)	0.08 lb/MMBtu	0.15 lb/MMBtu 0.20 lb/MMBtu (cyclone)



Connecticut Department of Energy and Environmental Protection

Single Fuel ICI Boilers in 2013 EMIT

Design Capacity (MMBtu/hr)	Natural Gas	No. 2 Oil	No. 4 Oil	No. 6 Oil	Other Fuels	Total No. Units	%
0 - <5	118	195	94	1	21	429	33.4
5 - <25	202	363	175	45	13	798	62.1
25 - <100	31	4	6	8	2	51	4.0
100 - <250	6	1				7	0.5
250>	1						0.1
Total No. Units	358	563	275	54	36	1286	
% Total	27.8	43.8	21.4	4.2	2.8		



Next steps

- If any other source would like to come in and meet with us, please let us know ASAP.
- Focus on applicability, emissions limitations, and compliance options in Phase 1 and Phase 2 in October.
 - Develop an outline and perhaps rule language for the first two areas.
- Share draft regulation outline/language with SIPRAC subcommittee by November 13th SIPRAC meeting.

